

REMARKS

Upon entry of the amendments in this paper, claims 1-51 will be pending in the above-identified application, with claims 6-11 and 35-46 being withdrawn. Claims 1, 5, 12, 13, 22, 34 and 47, are herein amended. No new matter is entered. It is respectfully submitted that this paper is fully responsive to the Office action mailed on November 12, 2009.

Claim Rejections – 35 U.S.C. §112

Claim 34 stands rejected under 35 U.S.C. §112, second paragraph, because there is insufficient antecedent basis for the limitation “the portable phone.”

Applicants have amended claim 34 and respectfully submit it is in proper form. As such, Applicant asks that the rejection be withdrawn.

On the Merits

Claim Rejections – 35 U.S.C. § 102(b)

Claims 1-5, 12-18, 20, 22, 23, 29 and 47-49 stand rejected under 35 U.S.C. §102(b) as being anticipated by EP 0670555 to *Nagasaki et al.*

Independent Claim 1:

Independent claim 1 recites:

An information reproducing method using a dot pattern, comprising the steps of:

scanning a medium as image data by scanning means such as a printed material on which is formed a dot pattern portion, which formed by arranging in accordance with a given rule dots generated by a dot code generating algorithm, in order to recognize various kinds of multimedia information;

converting the image data of the dot pattern portion into code data; and

reading multimedia information corresponding to the code data out of storing means to reproduce the multimedia information,

wherein said conversion comprises:

extracting a line composed by successive equally spaced dots, assuming one extracted line as a horizontal line, extracting a vertical line which extends vertically from the horizontal line, recognizing a vertical direction from the vertical line by a prescribed method, and extracting an information area.

Applicant has amended claim 1 to further define how the scanned data is processed. As discussed in the present specification, for example on page 30, line 2 through 16, the present application discusses how the dot pattern is turned into numeric information.

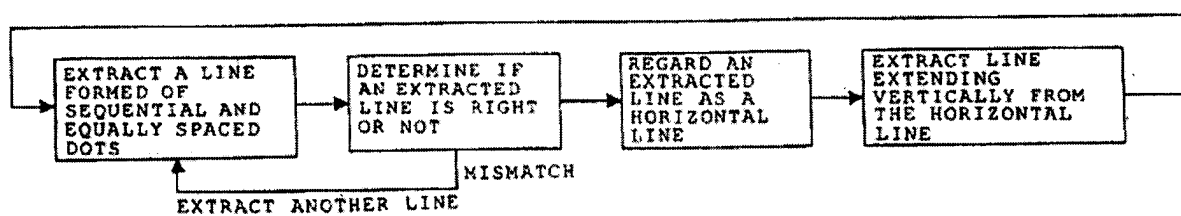
For instance:

In recognition of the dot pattern, first, a line composed by successive equally spaced dots 5 is extracted, and it is determined whether or not the extracted line is correct. If the line is not correct, another line is extracted.

Next, one extracted line is assumed as a horizontal line. This horizontal line is used as a basis to extract a line which extends vertically from the horizontal line. A vertical line starts from a dot which consists in the horizontal line and the vertical direction is recognized from the fact that the next dot or the third dot is not on the line.

Finally, an information area is extracted and information thereof is converted into numeric values to reproduce this numeric information.

Further, an example of this concept is also shown in FIG. 4 of the present application, as shown below:



Thus as recited in the application, two directions are used to reproduce numeric information. This feature is not disclosed in *Nagasaki*. For example, in *Nagasaki*, in column 4 it recites:

In this case, the restoring means stores the dot code, read by the read means, in the first memory means, detects, by the marker detecting means, the marker of each block from the stored dot code, detects, by the data array direction detecting means, the data array direction from the detected marker of each block, and outputs, by the first address control means, the dot code stored in the first memory in accordance with the detected data array direction.

Further, in column 14 it recites:

[U]sing four pixels around the interpolation position Q The dot code 36 read out from the frame memory 46B, which has undergone scan conversion in the above manner, is binarized by a binarization circuit 48.... A threshold value for this binarization is determined by a threshold determination circuit 50 using a histogram value or the like for each frame or each block in a frame.

Thus, *Nagasaki* uses blocks or frames to binarize the dot code 36. *Nagasaki* does not disclose extracting a line extending vertically, from the horizontal line, as recited in claim 1.

As such, *Nagasaki* does not disclose the feature recited in claim 1.

Independent Claims 5 and 12:

Regarding independent claims 5 and 12, as they contain similar features to that discussed above with respect to independent claim 1, please see our discussion above.

Independent Claim 13:

Independent claim 13 recites:

An information inputting/outputting method by camera inputting comprising the steps of:

printing on one surface of a printed material a dot pattern portion formed by arranging in accordance with a given rule dots generated by a dot code generating algorithm in order to recognize various kinds of multimedia information and an information transfer portion which includes a text, an illustration or the like to be recognized as information content;

wherein said dot pattern portion includes three different kinds of dots including, key dots, lattice dots and information dots;

capturing by a camera unit only image data of the dot pattern portion in the printed material and digitalizing the image data into numeric values; and

based on the numeric values, outputting information and a program corresponding to the dot pattern portion from a storing portion and executing the information and the program.

The examiner contends that claim 13 is disclosed by *Nagasaki*. Unfortunately, the examiner does not provide any rationale in how he believes the claimed features are disclosed.

Applicant asks the Examiner to point out in future Office Actions, where he believes the claimed feature is disclosed in order to help applicant expedite prosecution of the application.

Applicant notes that on page 41 of the present application, it recites:

Generation of the dot pattern 1 according to the invention is performed in such a manner that small dots (key dot (KD) 3a, lattice dots (LD) 3b and information dots 4) are arranged in accordance with a predetermined rule by a dot code generating algorithm in order to recognize information. Recognition of dot pattern 1 includes correction of distortion rate by a lens of the camera unit 2, correction of distortion due to tilt of the camera unit 2 and reproducing of numeric information of a key dot 3a (KD) and information dots 4. Image data of the dot pattern 1 is captured by the camera unit 2 which includes an image pickup device such as a C-MOS camera and CCD camera.

This feature of having 3 different kinds of dots picked up by the pickup device, is not disclosed in *Nagasaki*.

Independent Claim 22:

As independent claim 22 contains similar features as those discussed above regarding independent claim 13, the same rationale also applies to claim 22.

Independent Claim 47:

As independent claim 47 contains similar features to those discussed above with respect to independent claim 1, the arguments and rationale presented above regarding claim 1 also applies to independent claim 47.

Claim Rejections – 35 U.S.C. §103(a)

Claims 19, 21, 24-28 and 30-33 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Nagasaki et al.* as applied to claim 1.

As each of the dependent claims rejected under 35 U.S.C. § 103(a) depends from an independent claim addressed above, please see our comments regarding the independent claims.

In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

Application No. 10/529,440
Art Unit: 2876

Amendment under 37 C.F.R. §1.111
Attorney Docket No. 052340

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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